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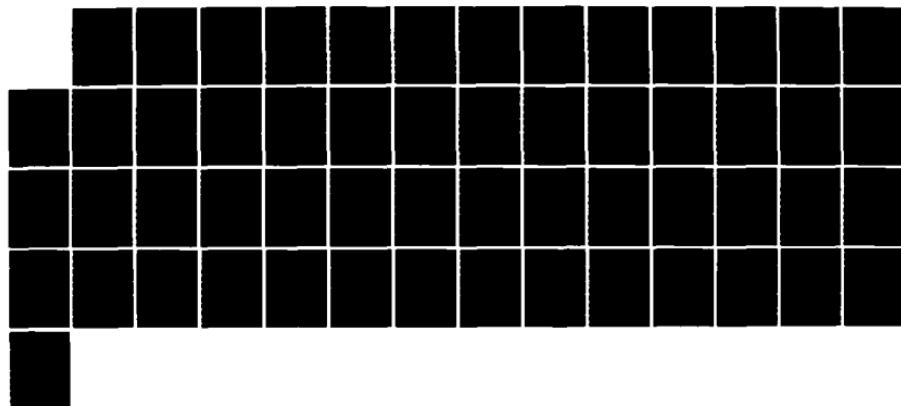
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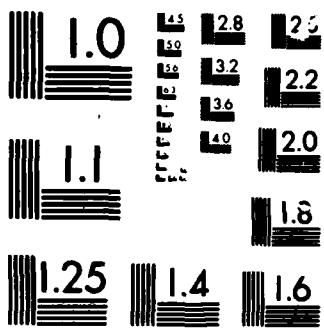
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Offensive Operations in Urban Europe: The Need for a "Heavy" Light
Infantry Force

by

Major Donald E. Kirkland
Infantry

School of Advanced Military Studies
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Infantry Force**

by

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ABSTRACT

OFFENSIVE OPERATIONS IN URBAN EUROPE: THE NEED FOR A "HEAVY" LIGHT INFANTRY FORCE, by Major Donald E. Kirkland, USA, 48 pages.

This study examines the capability of currently structured Army of Excellence infantry units to conduct offensive operations in urban European terrain. The study is based on the premise that Soviet forces have developed and maintain a strong capability to conduct offensive operations as part of an overall strategy for any major conflict in Europe. This conclusion is based on the history of the Red Army in World War II, the current force design of tactical units in the Group of Soviet Forces Germany (GSFG), and the tactical, operational, and political advantages of seizing and holding key West German urban areas should initial offensive operations against NATO forces prove unsuccessful.

The study examines U.S. MOUT capability based on the doctrine, equipment, and training from World War II until present. Lessons learned from urban combat operations in the Middle East in which Soviet, U.S. and Israeli doctrine, equipment and weapons were featured are reviewed.

The evaluations of the Army of Excellence Bradley-equipped mechanized battalions and the rapidly deployable light infantry battalions in conducting offensive operations against Soviet defenses in urban terrain conclude that neither is adequately structured to perform such missions. Based on the Soviet threat, a hybrid unit combining the firepower and mobility of mechanized infantry and the dismounted capability of light infantry to perform search and clear operations and to fight in armor restricted terrain is needed. The report concludes that there is a need in the Army force structure for infantry similar to the armored personnel-equipped H-series T.O.& E. units for urban offensive actions.

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INTRODUCTION

"The worst policy is to attack cities. Attack cities only when there is no alternative."

--Sun Tzu¹

The outbreak of hostilities in Europe between NATO and the Warsaw Pact is envisioned as a conflict centered around masses of tanks and armored vehicles fighting a mobile, fluid battle along a non-linear front. Of prime importance in such battles will be the control of favorable avenues of approach for mounted forces and the terrain which controls these approaches. The Soviets hope to use these routes to facilitate deep, violent and sustained offensive operations to seize the initiative at the start of the war and drive deeply and decisively into the NATO rear.² The U.S. Army's Airland Battle doctrine seeks to frustrate this plan by delivering rapid and unexpected counterattacks against critical units or areas, striking at the enemy's center of gravity, and destroying the coherence of the enemy operations.³ Current force modernization programs have modified organizations, equipment and training to increase the ability of the U.S. Army in Germany to shoot deep, move fast, and most importantly, to fight mounted.

This increasing reliance on mounted warfare on both sides comes at a time when the amount of terrain conducive to these types of operations is steadily decreasing in Western Europe. The density of population in what is now the Federal Republic of Germany was 166 persons per square kilometer in the mid 1940's.

By 1976 it had increased to 253 persons per square kilometer.⁴ About 80% of the population lives in urban areas, and this should increase to about 90% by 1988.⁵ The rapid increase in urbanization of the Federal Republic has produced 4 cities with populations in excess of 1 million, 49 with over 100,000 and 235 with inhabitants ranging from 3,000 to 100,000.⁶ The inexorable growth of the cities has resulted in the linking of separate cities by urban strip areas to form massive conurbations which are projected to cover over 30% of the surface of West Germany by the year 2000.⁷ For example, the Rhein-Main conurbation forms an urban conglomerate of over 10,000 square kilometers.⁸

The growth of urban areas over the traditional open spaces in central and north Germany will have significant impact on both potential adversaries. The Soviets now regard military operations in urban terrain (MOUT) as inevitable, and maintain a tactical doctrine, organization, and weapons suitable for such tasks. The U.S. Army's doctrine, organization, training and equipping of units for MOUT operations appears neglected as the transition to the Army of Excellence program gains momentum. The projected armor and mechanized divisions fight using mobility, armor protection and firepower. The light infantry division emphasizes operations in low intensity conflicts or in terrain unsuitable for committing regular mounted forces. While suitable for executing the tenets of Airland Battle in such conditions, can these units conduct offensive operations in the European urban terrain against a Soviet force?

THE ROLE OF MOUT IN EUROPE

"In a modern war, should the imperialist unleash one, combat action in a city will be inevitable. The conditions prevailing in a city will have a great influence on the type of action and critical procedures employed...and also on combat employment of weapons during the seizure of them as well as in the defense of them."

--Maj. Gen. A.K. Shovkolovich*

Large conurbations such as the Rhein-Main and the even larger Rhein-Ruhr in the North German Plains would pose a serious obstacle to the Soviets in any attempt to quickly occupy Germany before the effects of a Western military and economic mobilization can have a decisive effect. The very size of the urban sprawl will preclude any effective attempt to bypass, or will make such an attempt tactically fraught with danger by presenting an exposed flank. An attempt to penetrate these massive areas, assuming they would be defended by NATO forces, would result in a virtual cessation of the rapid tempo of operations which the Soviets stress as necessary to their operations. The Soviets previously experienced such problems in fighting for large towns in 1945, when the Soviet High Command, STAVKA, noted that "...battles in towns lead to heavy losses and prevent the Army from making proper use of its artillery, rocket launchers, tanks, and aircraft." This resulted in overall superiority being "... wasted by the [Red Army] being sucked into endless street fighting where the enemy is firmly entrenched."¹⁰

Smaller urban areas tend to dominate the convergence of local

lines of communication. Since almost all of the Soviet units are mounted and require the use of road networks, there is a tendency for attacking units to mass at the juncture of several road networks before branching out again at the far side of the town. This constriction presents defenders with a perfect opportunity for close-in ambush of advancing units, trapping units in kill zones as the latter become compressed. In addition, such choke points provide excellent interdiction points for air and artillery disruption of second echelon and support units.

Scattered between the large and medium cities are over 21,000 villages with populations of less than 3,000.¹¹ These villages are spaced about 1500-2000 meters apart and provide good mutual defensive positions for anti-armor strongpoints. The advantage of a series of dismounted strongpoints supported by a strong mounted counterattack force was envisioned as long ago as 1942 by Ferdinand Miksche as a defense against the German "Blitzkrieg" tactics of mechanized warfare.¹² The increased lethality of antiarmor systems, particularly the antitank guided missile as demonstrated in the 1973 Arab-Israeli war, makes this defensive web of coordinated strongpoints a serious threat to Soviet high speed armored thrusts.

While urban areas offer the Soviet offensive into Central Europe some serious obstacles, they also present numerous opportunities. These advantages include tactical as well as operational and strategic opportunities, which could prove decisive.

The capture of key urban areas and their supporting lines of

communication give the Soviets an additional avenue of approach that is seldom considered. With the majority of NATO forces structured for long range mobile warfare, the use of an entirely unexpected approach such as the conurbations and their connecting urban strips could result in a tactical and operational surprise equal to that of Germans using the Ardennes twice to gain advantages over the Allies in World War II. Brigadier Ernst Klaffus, then the Chief of Combat Requirements Branch, Operations Division, Supreme Headquarters Allied Powers Europe, summed up the idea very well in 1983 when he stated that if the Soviets failed in their attempt to penetrate NATO defenses in the traditional thrusts over favorable terrain "...[the Soviets] will not hesitate to commit strong infantry forces--dismounted or mounted with tanks--and attack through densely populated...terrain."¹³

The use of captured urban centers as logistical support bases and assembly areas for reserve formations offer significant advantages in light of the Airland Battle doctrine for deep battle operations. Large cities offer logistical support assets, rations, fuel and shelter for troops. They are serviced by a variety of lines of communication such as road, rail and water transportation. The very size of these urban areas provide a reduction in the thermal and electronic signatures of the occupying forces and complicate the intelligence and targeting process.

Targets identified within urban areas may be protected from attack and destruction due to political considerations such as the need to preclude civilian deaths and destruction of property. The

concept of having units "hug" the populated urban areas may preclude the use of nuclear weapons by the Allies, or their direct attack by ground forces because of the certainty of collateral damage.

The political and economic impact of the capture of major urban centers and their population could effect the willingness of our NATO allies to continue the fight.¹⁴ A 1976 Rand Corporation study revealed a reluctance by many in the NATO Alliance to consider the necessity for fighting within the major cities, either to defend them or to undertake their recapture.¹⁵

Soviet military operations in the urban areas of Europe could effectively complement their overall military doctrine for swift, offensive operations against NATO. While there remains little doubt that the Soviets are initially prepared to conduct operations culminating in a decisive battle in open terrain, a major defeat could require the Soviets to shift to exploit possible weakly defended routes through cities. The seizure and successful defense of major urban areas by the Soviets could have significant military and political repercussions. NATO forces would face a fight in an environment which does not suit their primary strengths. The prolonged control of major urban areas by the Soviets could disrupt the solidarity of the Alliance, and provide key bargaining points for the Soviets should the conflict be resolved by negotiations. The tactical disadvantages of attacking urban targets may in the end offer the Soviets operational and political opportunities which justify such risks.

THE SOVIET MOUT THREAT

"Combat in a city has an especially stubborn and fierce nature. The one who possesses the stronger moral qualities such as boldness, fortitude, endurance and resourcefulness and knows the procedures and methods for fighting in a city will be the victor."

--Maj. Gen. A.K. Shovkolovich¹⁶

The Soviet offensive capability to conduct operations in urban areas is based on their experience in World War II. Soviet Marshals such as Chuikov, Brusilov and Zhukov at first copied and later improved the German concept of infantry, tanks and engineers formed into urban assault teams. The tactical formation of assault groups(platoons) and detachments(companies) composed of infantry units with attached tanks, engineers, antitank guns, and artillery in the direct fire mode were formed on the march when it became necessary to assault an enemy fortified or urban area. The standard tactic was for the city to be surrounded and cut off from reinforcements. The enemy defenses were probed by recon units to determine weak spots. Supported by intense artillery and air concentrations, assault detachments would secure a lodgement. A second echelon would be quickly passed through to move swiftly to the center of the urban area to seize key areas such as bridges, government centers, communications centers and reserve positions. A third echelon was also used at times to mop up any remaining pockets.¹⁷ In an attempt to maintain the tempo of the assault, an additional tactic was used when the enemy defenses were weak or hastily prepared. Advanced detachments would precede the main body

and attempt to occupy the town before the enemy could withdraw into it and prepare positions. At other times, the lead elements would bypass defended towns and race deep for subsequent undefended towns, leaving only a guard force in contact until additional forces could be brought up.

Today, Soviet troop organization and equipment in the Group of Soviet Forces Germany (GSFG) maintain a capability to execute the doctrinal requirement to fight in an urban environment. Special purpose units such as airborne and air assault units can use their air mobility to quickly seize undefended cities. The revival of the operational maneuver group gives the Soviets a similar capability on the ground. Regular motorized rifle divisions have both the mobility to bypass and isolate urban areas as well as the organic assets to conduct deliberate assault operations. In a Soviet motorized rifle division, there are three motorized rifle regiments. One is equipped with the BMP carrier, which is optimized for rapid mounted warfare in a nuclear or chemical environment. The remaining two are mounted in the BTR series wheeled personnel carriers. The BMP regiment is a true mounted fighting unit; it develops the vast majority of its firepower while mounted. The BTR regiments lack this mounted fighting capability. Its infantry units must dismount to develop their firepower potential. As such, they are decidedly inferior to U.S. Bradley equipped infantry forces in the open. The thin armor and gasoline engines of the BTR have proven disastrous in recent combat operations. The effect of artillery blast and shell fragmentation on the Syrian BTR's on the Golan Heights in the 1973 war was described as amazing.¹⁰ Victor Suvurov, a former Soviet

officer described the BTR family of vehicles as "coffins on wheels".¹⁹ Yet two out of three infantry regiments of the division are equipped with these machines, and a new model of the BTR is currently being fielded which suggests that the Soviets are satisfied with its performance. Therefore, an infantry carrying vehicle instead of a true infantry fighting vehicle would indicate the preparation for extensive dismounted operations involving offensive and defensive combat in suitable terrain such as built up areas.

A brief review of weapons and organization at the regimental level down confirms this capability. The regiment is designed as an all arms organization with its own organic artillery, armor, and engineer support. Thus the regiment has the assets to develop the assault groups and detachments as depicted in the combat experience of World War II. In addition, organic to each battalion are weapons which are particularly useful in urban combat. For example, each platoon has a dedicated sniper equipped with the 7.62 SVD rifle. Each company has a section of automatic grenade launchers for short range area coverage. The battalion possesses a section of 73mm recoilless rifles for close-in destruction of armor or point targets. Finally, all units from squad level up are liberally equipped with the new RPG-16, the successor to the highly effective RPG-7 rocket propelled grenade launcher that has proven to be equally effective against strongpoints as well as armored vehicles at close range.

The Soviets have increased their emphasis on training for operations in built up areas. Eight company-sized MOUT training areas were constructed following a review of the need for

increased emphasis on urban combat by Major General Shovkolovich, who in 1971 published the most comprehensive review of Soviet MOUT doctrine since the end of World War II.²⁰ In 1981, a new facility was developed for the GSFG in an attempt to correct serious deficiencies in conduct of military operations in urban areas.²¹ The emphasis on mounted warfare conducted by massed units resulted in troops trained to react as part of a large (battalion) combined arms unit to a series of standard battle drills. Initiative was viewed as counter-productive to the concept of instant reaction to orders. Thus junior officers and NCO's trained in mounted warfare lacked training in leading small unit actions which characterized urban fighting. Finally, the tactics of massed firepower and the close assault considered effective in open terrain would be suicidal in built up areas.²²

The new training facility is attempting to teach the GSFG units those lessons learned by the Red Army of 1944-45. Training for combat in cities is conducted at the company and platoon level rather than at battalion as normally expected. In addition to stressing traditional skills such as target identification, camouflage, and weapons selection and employment, increased emphasis is placed on preparing the soldier for the psychological shock of urban warfare.²³ Particularly important is the training of NCO's to react to situations without waiting for orders. This encouragement to use initiative is inherently contradictory to the soldier's previous training. The expected separation of sub-units from the collective security of the larger group during MOUT operations and the resulting lack of constant supervision has led Soviet leaders to consider only attacks by weapons of mass

destruction as posing a greater psychological threat to the typical Soviet soldier.²⁴ In such cases, the Soviets view the unit political officer as the catalyst for evoking the correct spirit of determination to perform military duties in defense of the Motherland. It is also his task to distribute active members of the Komsomol who must conduct political party work, indoctrination, and set the example of correct behavior in the face of the enemy.²⁵

The Soviets appear satisfied with the validity of their MOUT doctrine, equipment and training. As in most of their military art, the doctrine has its origins in the successful operations of World War II. The organization and equipment concepts have remained basically unchanged for over forty years, reflecting only gradual evolutionary changes such as the incorporation of infantry carriers and technological improvements in weapons systems. While it is true that the Soviets have training deficiencies, it should be noted that an increased effort is currently underway to correct these problems as much as possible within a system where the strengths of one form of combat (mobile warfare) are the weaknesses of another (MOUT).

U.S. MOUT CAPABILITY

"It is obvious that the ability to conduct operations in built up areas will steadily increase in importance. It is equally obvious that new weapons, new techniques and tactics will be required."

--FM 100-5, 1976²⁶

While the Soviets continue to refine their military capability in urban terrain, the U.S. is struggling to develop one. The basic problem has been an inconsistency with doctrine, equipment and tactics, requiring periodic re-evaluation of all three.

Although the U.S. Army participated in numerous operations in urban areas in World War II, these operations never reached the scope and intensity of those on the Eastern Front. Therefore, even though by some estimates, close to 40% of all engagements fought by the allies in Europe involved urban areas, the majority involved small units, were conducted with complete firepower superiority over the enemy, and had little effect on the overall Allied situation.²⁷ Epic battles such as occurred in Stalingrad and Berlin did not occur on the Western Front where large cities such as Rome and Paris were captured and recaptured without serious resistance. Sufficient fighting did take place for some form of official doctrine to develop but, there were no major changes to the pre-war doctrine.

Like their Russian allies, the Americans attempted to bypass

urban areas of resistance when possible. When such an area could not be bypassed, an attempt was made to surround and cut off the area prior to an assault. At this point, there was a departure from the Soviet's concept for MOUT. While armor units were found to be effective in sealing off the approaches and exits to these urban areas, the actual assault was an infantry affair. The artillery would fire an intense preparation, then shift to targets farther in the rear. The infantry assault force would attempt to establish a foothold in the town, and then begin a systematic, thorough clearing of the town. Tanks and tank destroyers were used as direct fire support. Artillery was seldom used in such a role except in special occasions. Firepower and time were used extensively to reduce the number of casualties and took precedence over maintaining the momentum of the offense.

The May 1941 edition of FM 100-5, Operations, treated the attack of towns as being similar to those problems presented by an attack on fortified positions. This concept was strengthened by experiences in World War II in such fortified cities as Brest, Metz and Aachen. Lessons learned during the war were not formally compiled into published doctrine until July 1952 with the revision of FM 31-50. Again, urban combat was lumped into fighting for fortified areas. Phasing of the operation into the isolation, penetration, and systematic clearing of the city remained. Despite the documented use of direct fire artillery and its effectiveness, doctrine still called for artillery use only as a supporting arm firing indirect to the rear to cut off exits. Tanks were preferably used in phase one and two to provide stand-off fire and were to be committed in street fighting only when adequate

infantry support could be given.

The advent of nuclear weapons further reduced the importance of conducting operations in large cities. FM 100-5, Operations dated January 1958 stressed the acceptance of the nuclear battlefield. To its comment that cities were topographically known points subject to destruction by enemy artillery fire was now added the realistic capability to make enemy positions untenable with atomic fires. Field Manual (FM) 31-50 was revised in 1964 partly to comment on this increased capability. The preference for bypassing of large urban areas was now given an additional reason; the massing for an assault would present the enemy with a lucrative nuclear target. Therefore, the best alternative to bypassing a city was to destroy it by nuclear, biological or chemical attack.²⁰

It was not until the end of the Viet Nam conflict that a serious re-examination of MOUT doctrine was undertaken. The return to the defense of Europe as the prime concern of the Army was recognized in the 1976 edition of FM 100-5, Operations. The manual acknowledged the inadequacy of MOUT doctrine fighting a conventional, high intensity conflict in Europe when it stated "The whole subject of combat in built up area is not well versed." and recognized that the concept of "...conducting operations in a continuous and contiguous built up area and the principles of these operations are new. It is a novel and untested dimension of warfare."²¹ The 1976 version of FM 100-5 also contained an appendix concerning MOUT which was drawn primarily from the 1972 Combat in Cities Report from the U.S. Army Infantry School.

A new manual entirely devoted to operations in urban terrain,

FM 90-10, Military Operations On Urban Terrain, was published in August 1979 to update the doctrine in view of the then present organization and equipment.³⁰ The concept of avoiding combat in built up areas if at all possible remained, as did the technique of isolating the objective, gaining a foothold, and the systematic clearing of the area. The most significant change was the addition of the doctrine for a hasty attack of weak or ill-prepared positions. The hasty attack concept was made in recognition of the new mobility and combat power of the armor-mech combined arms team. If possible, heavy forces were considered for use in bypassing and isolating urban areas, but for the first time consideration was given to the fact that urban sprawl was making the World War II tactic of completely isolating the city increasingly difficult.

The emergence of the Airland Battle doctrine in 1982 and the pending revision of the 1982 version of FM 100-5 will have a decided impact on the doctrine for MOUT that is represented by FM 90-10. The Airland Battle doctrine as set forth in FM 100-5, Operations (DRAFT) retains the classic warning to avoid committing forces to urban areas unless the mission requires it, yet admits that it will be difficult to avoid urban combat in heavily industrialized regions of the world.³¹ While stating that the operations of heavy units (armor and mechanized infantry) are impeded by urban areas and that infantry forces are best suited for urban combat, it refers the reader to FM 90-10 for details on how to fight in urban areas. Unfortunately, FM 90-10 deals almost exclusively in how to fight in urban areas using heavy forces. This results in a doctrinal divergence between the two manuals, in

short a failure of practicing (FM 90-10) what we preach (FM 100-5).

The advent of light forces adds a new dimension into the concept of who will fight the urban battle. Field Circular 71-100, Armored and Mechanized Division and Brigade Operations, dated May 1984, is the prime manual in describing how a armored or mechanized division will fight the Airland Battle doctrine ranging from high intensity conflicts in Europe to foreign internal defense operations at the opposite end of the spectrum. The issue of MOUT is conspicuous by its absence, save for two paragraphs copied from FM 90-10.³² However, the manual for the new light division, FC 71-101 Light Infantry Division Operations, lists the conduct of MOUT operations as a prime mission for the division. While discussing MOUT operations, the manual warns of several deficiencies inherent in using light divisions for such operations.

A summation of U.S. MOUT doctrine over the last 40 years would be a doctrine of a few staunch principles, increasing changes, and almost continuous neglect. The concept of attempting to bypass urban areas if possible is still valid, but the advent of conurbations in Europe will make this option difficult to execute. The three phases in seizing urban terrain are still present in the latest manuals. Other changes include the updating of the doctrine to acknowledge mechanized forces conducting MOUT, only to apparently have this changed by the introduction of the light division. The neglect of the need for an updated MOUT doctrine can be seen in the lack of articles in professional publications. Lieutenant Colonel John Mahan cites that during the

period 1978-1982 only 13 articles concerning MOUT doctrine appeared in the major professional magazines.³³ The advent of the light division and its projected role in MOUT will probably increase such interest, but it may be a case of fitting doctrine to suit a type unit rather than the reverse. For example, we are now reorganizing our units to better execute the ^etenants of the Airland Battle doctrine; we did not change our doctrine to better fit our units.

The organization of troops for combat in cities has traditionally remained a basic infantry unit, occasionally reinforced by engineers or tanks, but never has this been consistently done. Considerations were often given to what was not needed. For example, tanks were not needed because streets and alleys provided ambush sites, and tanks could not effectively employ their main armament. Artillery effects were to be minimized to preclude excess rubble. When tanks were to be used, they would form teams with the infantry, the latter providing close in protection and target information.

The post-World War II doctrine identified the rifle squad as the basic maneuver unit. The squad was divided into a covering party and search party. The search party consisted of the squad leader and two teams, normally consisting of two riflemen per team coordinated by the squad leader. The remainder of the squad was under the assistant squad leader and provided support.

FM 90-10, Military Operations in Urban Terrain, along with its companion manual, FM 90-10-1, An Infantryman's Guide to Urban Combat, remains the most detailed source for the organization of troops for urban operations. The squad remains the

basic unit of maneuver, divided into the assault team and the covering team.

The organization for infantry units equipped with the M2 Bradley will require a different level of organization, as their dismount strength is inadequate for squad level work. A full strength platoon will normally only possess an 18 man dismounted element, assuming a 3-man element remains to operate the fighting vehicle.⁵⁴ FM 90-10-1 considers the fighting vehicle element to be the covering force, while the remainder of the squad becomes the close combat force.⁵⁵

The range of equipment available for use in MOUT has steadily decreased. The basic rifle battalion has only its organic small arms, grenade launchers, and the disposable M72 LAW. The primary armor and point defeating systems are the Tow and Dragon missile systems. In an urban combat environment, they suffer numerous deficiencies. The arming distance for the systems are 65 meters, which limits their employment in the close-in fight. In addition, problems with weight, maximum and minimum elevation-depression, and warhead characteristics make their use as the only available weapon systems unacceptable for urban combat.

It is apparent that the ability of the U.S. Army to respond to a Soviet seizure of urban terrain in Europe may well be inadequate. The question then must be asked if it is our doctrine or our organization that must be reviewed and corrected. The review must take into consideration the threat characteristics and the historical lessons learned since the close of World War II.

THREAT DEFENSIVE DOCTRINE AND LESSONS LEARNED FROM RECENT
OPERATIONS

"As a rule modern cities are military-political, economic, and cultural centers and many of them are road, waterway and airline centers. Holding them has great political and military importance."

--Maj. Gen. Shovkolovich³⁶

Soviet defensive doctrine in urban terrain was also developed from experiences in World War II. Motorized rifle battalions are the basic units for defense. The battalion defends by use of company and platoon strongpoints in the first and second belt, and keeps a small reserve of one or two platoons. Action at the platoon and company level will decide the outcome of the battle, therefore these units will receive command of other branch units such as armor, artillery, antitank, and engineers. The strongpoints will usually be on the outer perimeter of the city in order to get the maximum range of weapons to bear on the approaches and to cover the obstacles and minefields. Counterattacks are planned to take advantage of covered and concealed approaches to the flanks of the penetrating enemy. These are usually underground routes such as sewers, subways or basements. The action is viewed as being conducted at close range and the uses of automatic weapons, grenade launchers, hand grenades and manually operated antitank weapons are considered the most effective.³⁷

Tanks attached to the battalion are assigned down to platoon and individual positions to act as strongpoints or to reinforce the antitank defense. Tanks fire from static positions, or form ambushes along the most likely avenues to cover the flanks or rear of a position, gaps between strongpoints, high speed avenues of approach, or open squares.³⁸

Up to 50% of the supporting artillery is dedicated to the battalion in the direct fire mode.³⁹ These guns are assigned to the company and platoon strongpoints, and given subsequent firing positions. Artillery and mortars remaining under the control of the battalion fire from covered positions to disrupt known or suspected enemy attack positions, cover gaps between strongpoints, and to isolate enemy penetrations from reinforcement prior to launching the counterattack.⁴⁰

Antitank units are incorporated into the strongpoints to obtain the best fields of fire along streets, main transportation arteries, and expected routes of the main attack.⁴¹ Sappers prepare obstacles and minefields along the approach to the city. Inside the city, their primary tasks are to prepare fields of fire by selective rubble, and to recon and prepare routes for movement between buildings by blasting "mouseholes" between connecting walls of buildings.⁴² Security for the preparation of the defense is provided out to 30 kilometers from the town by combined arms units.⁴³

Soviet defense of a city is therefore built on the historical lessons of the past, and features a combined arms approach with infantry as the base unit. In addition, a study of recent urban

combat actions involving Soviet trained or equipped client-states provides further insights on the optimum organization, training and equipment of U.S. units for future operations against a Soviet style defense in the cities. Three such examples used for illustrative purposes are the fight for Suez city in 1973, the battle for Khorramshar in 1980, and the seige of Beirut in 1982.

The Battle for Suez City in October 1973 was important tactically, strategically, and politically to both the Egyptians and the Israelis in the 1973 Middle East War. Tactically, the city controlled the sole remaining line of communication to supply the beleaguered Egyptian Third Army in the Sinai. It was strategically situated at the southern entrance to the Suez Canal. Finally, control of the city would give the victor a stronger claim on what territory was controlled at the initiation of the United Nations mandated cease-fire and the ensuing political negotiations.⁴⁴

A mix of regular forces augmented by a 2000 man militia had one month to prepare the Egyptian defense of the city, which was planned in four stages.⁴⁵ The first stage was a series of trenches along the perimeter of the city. A limited number of tanks were placed in the city to cover the main avenues of approach and to provide ambushes in depth. The second stage was a defense in depth throughout the city, composed of militia strongpoints. The third stage was a prepared strongpoint defense of key targets such as the water and power plant. The last stage was a general reserve for each sector commander. There was no organic artillery to provide to the strongpoints, but an antitank company was dispersed to key strongpoints to provide direct antitank missile fire down

long avenues of approach. The main emphasis was placed on strong automatic weapons fires, RPG's and magnetic antitank hand grenades used in close-in ambushes.

The Israeli attack to take the city was plagued by a variety of problems. The decision to take the city was made at the last minute and had to be rushed through without complete preparations. The brigade tasked to conduct the main attack had all of its organic armored infantry committed elsewhere and had to be hastily reinforced with a battalion of paratroopers plus a reserve paratroop battalion and a small recon unit. Using a tactic referred to as BUZZ, the Israeli armor planned to initiate rapid thrusts along parallel streets, using speed, armor protection and a high volume of fire to gain shock effect and thus seize key objectives before the enemy could recover. This was a doctrinal technique practiced by the Israeli armored force and its organic armored infantry units in peacetime, but it differed in many ways from the doctrine practiced by the remainder of the Israeli Defense Force. The doctrinal difference would soon become apparent, and lead to disastrous results.

The 217th Israeli Brigade with the attached two battalions of paratroopers and a recon unit launched its assault from the south to seize key road junctions in the center of the town.⁴⁴ The brigade was deployed in a long column with a tank battalion in the lead, followed by the regular paratroop battalion and then the reserve paratroop battalion and recon force. The armor, following its doctrinal method, advanced rapidly and soon outpaced the infantry units. It therefore was isolated when it stumbled into a

prepared Egyptian killing zone at the Arba'n Junction. The intense antitank, automatic weapons and 23mm antiaircraft fire killed or wounded almost every tank commander.⁴⁷ Reacting according to training, the battalion recovered and moved quickly out of the zone, only to be surrounded at its final objective deeper in the city. Meanwhile, the regular paratroop battalion was reacting to the ambush using its own doctrine, which called for a rapid dismount and clearing of the buildings. The deputy brigade commander convinced the paratroopers to remount their vehicles and attempt to follow the lead tank battalion. This resulted in the battalion moving into the same killing zone just vacated by the armor battalion, and a second ambush. The third element, consisting of the reserve paratroop battalion and the recon unit were still separated at the initial halt. Infantry dismounting to clear buildings found the enemy had escaped to nearby buildings by previous reconned routes and would quickly return if the building was not permanently secured. Israeli units pinned down and unable to generate sufficient infantry forces to clear all buildings soon lost their supporting vehicles to antitank and grenade attacks.⁴⁸ The surviving elements of the tank battalion withdrew at dusk, followed by the remnants of the paratroopers who exfiltrated later that night.⁴⁹

The success of the defense was due in part to the meticulous planning of the defense to inflict the maximum attrition on a force which traditionally relied on its doctrine of maneuver and firepower to avoid attrition. The Egyptian commander adapted certain parts of the Soviet doctrine to fit the particular needs

of his force, but did retain the concepts of short range engagements and use of the ambush keyed on critical avenues of approach.

The lack of a common MOUT doctrine by the Israelis resulted in dissimilar training programs within the Israeli Army. The brigade commander had to fight with troops who had little experience with tanks, and no understanding of how they trained. The Egyptians on the other hand enjoyed a great degree of success in using inexperienced militia because they were assigned limited tasks and were trained repetitiously to carry out those tasks.⁵⁰

The Israelis found that two of their most dependable weapon systems failed them in urban fighting. Once stopped in the city by narrow routes, obstacles, or stalled lead vehicles, tanks quickly became vulnerable to missile and RPG fires as well as Molotov cocktails and magnetic antitank grenades from adjacent buildings. Tactical air was totally ineffective once the two forces became intermixed. The one bright spot was the performance of the M-113 personnel carrier mounting three machine guns. Their ability to move troops under protection and deliver volumes of heavy machine gun fire on several occasions produced the fear the Israelis counted on in their BUZZ tactics.⁵¹ The Egyptians achieved excellent results with ATGM's and RPG's once the Israeli armor was slowed or stopped. The use of 23mm air defense machine guns in the ground fire mode provided excellent suppression effects on tanks and personnel carriers alike.

The Iran-Iraq war erupted in September and continues today, more or less as a stalemate. The Iraqis invaded Iran with a three

division attack designed to provide a "blitzkrieg" victory over an Iran whose regular army and political system were in shambles after the revolution of Khomeini. The city of Khorramshar became a target for attack only through a series of errors and events which seem to become commonplace in war. The city lay on the road to the real prize of the war- the major port city of Abadan. The initial success of the Iraqis resulted in the premature announcement that Khorramshar had fallen. To save political embarrassment, plus to achieve a psychological boost to a sagging war effort, it became imperative to take the city. The Iraqis also believed that Iran would not put up serious resistance to the capture of the city. By the time it became apparent that Iran had placed increased emphasis on retaining the city, Iraq had too much invested in the attack to withdraw.⁵²

Iraq's strategy to end the war quickly, seize the territory it wanted, and avoid casualties as much as possible was soon dashed by the extremely slow and methodical advance of the Iraqi Army. It took over eight days for the Iraqi forces to advance the ten kilometers to the northern edge of the city. For the next week or so, the Iraqis attempted to use their overwhelming firepower to force the Iranian militia defending the city to abandon their positions. This reliance on artillery proved ineffective, and on 6 October 80 the Iraqis were forced to divert troops and armor from other fronts to encircle the city from the north and attempt to cut the last Iranian supply line from Abadan. By late October, the last remnants of the militia were wiped out and Khorramshar was secured. The capture of the city had cost the Iraqis time,

troops, munitions and equipment which eventually precluded them from capturing the key objective of Abadan. The defense of Khorramshar bought the Iranians sufficient time to organize resistance, whip up popular support for the "holy" war, and provided a major boost in the morale of the country.

The failure of the Iraqis to quickly seize Khorramshar was the result of the lack of a coherent doctrine for urban warfighting.⁶³ The Iraqi Army had placed its emphasis on preparing for a maneuver war, such as the fighting on the Golan in 1973. The decision to take Khorramshar was made with an army unprepared to undertake such missions, and therefore it was forced to rely on the firepower of artillery and tanks until the strategic and political situation required the use of its scant infantry forces to engage in a war of attrition.

Training on both sides for MOUT was non-existent. The Iranians who formed the militia quickly adapted to the defensive hit and run tactics of the urban guerilla. The Iraqis had devoted the majority of their training to conducting mounted operations in accordance with the Soviet doctrine. This dependence on only a limited scope of training for its regular ground forces found the Iraqis unprepared for the close-in style of fighting in the city.

No weapon system proved to have a decisive advantage. The Iraqi dependence on massive firepower without follow up infantry had little effect on the ability of the Iranians to continue the defense. The Iranians had great success in using hand held antitank weapons such as the RPG to destroy Iraqi armor when it was unsupported by infantry.

The Battle of Beirut between the Israeli Army and the Palestinian Liberation Organization in July-August of 1982 had several important aspects concerning the size of the city, its design and composition, and the effects it had on the offensive operations of the attacking force. The city itself is much larger than the previous examples and is representative of European styles in architecture and construction.⁵⁴ The battle also illustrates how a force enjoying great tactical success in the open can lose that initiative in the transition to urban operations.

The Israeli Army invaded Lebanon with the objective of destroying the P.L.O. forces operating in southern Lebanon. After defeating Syrian efforts to intervene, the Israelis forced the P.L.O. into an enclave in West Beirut. At this point the Israelis faced a dilemma. As a maneuver oriented army, the Israelis were not prepared to conduct the house to house fighting required to root the enemy out of his final positions. A conventional battle would result in massive caualties both to the army and to the civilian refugee population, two things Israel could not afford militarily or politically.⁵⁵

The Israelis decided to conduct a modified siege and rely on their enormous advantage in firepower to literally blast the P.L.O. out of Beirut. On the 35th day of the siege, the Israelis launched a three pronged offensive designed to seize the P.L.O. headquarters and force the Palestinians to evacuate. The attack made initial gains in the south, but was stopped with heavy losses in the downtown section of Beirut, and was called off after the

Israelis suffered the heaviest one day losses in the war.⁵⁶ Thereafter, the Israelis were forced to rely on continuous fire support from artillery and air to coerce the P.L.O. to accept evacuation. The Israeli Army lost 88 soldiers killed and 750 wounded during the siege, or about 23% of its deaths and 32% of its wounded for the entire campaign.⁵⁷ The heavy reliance on munitions and the need to call up reserves cost the economy almost one and one-half months of its gross national product.⁵⁸ Equally important, the lengthy siege and the unavoidable casualties contributed to the loss of public support for the war at home as well as damaging Israel politically abroad.

The lack of a MOUT doctrine in the Israeli Army cost them a rapid victory over the Palestinians. The P.L.O. could not stand up to the superiority in mobility and firepower of the armor-heavy Israeli Army in the open. However, in the city these strengths of the Israeli Army became its weaknesses.

The lack of a MOUT doctrine resulted in a weak training program for the Israeli Army. The Suez City defeat in 1973 was shrugged off as atypical, and a crash course had to be initiated in the town of Damor for Israeli paratroop forces prior to commitment in Beirut.⁵⁹ The Palestinians profited by their almost constant "on the job" training resulting from their involvement in the Lebanese Civil War which had been going on since 1975.

As part of their siege efforts, the Israelis had great success in reducing Palestinian strongpoints by use of self-propelled howitzers in the direct fire mode. In addition, self-propelled 20mm Vulcan air defense weapons were found to be

effective suppression weapons in cities. Tanks were also useful, but care had to be exercised when approaching the range of light antitank weapons without accompanying infantry.

This brief review of current Soviet defensive doctrine and tactics and the lessons learned as the result of recent fighting involving urban areas provides a base of information to provide the criteria for evaluating the capability of selected U.S. units to perform offensive operations against a Soviet defense of an urban area in Europe. These criteria can be divided into three main categories: tactical execution of the MOUT doctrine in FM 90-10, organization for such actions, and the training and equipment available to each type unit evaluated.

FM 90-10 considers two types of attacks which will be used for the evaluation. The hasty attack is used when defenses have not been prepared and attacking forces can exploit maneuver and initiative to locate weak spots, fix or destroy enemy elements and rapidly move through or around the weak spot.⁴⁰ The deliberate attack is required when the enemy defenses are prepared and there are no assailable flanks or weak spots. Operations will be planned to isolate the area, gain a foothold, and conduct a systematic clearing of the objective.⁴¹

The best organization to execute this doctrine must have the flexibility to conduct a hasty or deliberate attack. The hasty attack requires a unit with the mobility to move its forces quickly, and the firepower to isolate and suppress any weak or unprepared resistance. The deliberate attack requires a force to provide long range fires to isolate the area, a force combining

mobility and massed firepower to provide the shock action necessary to rupture the prepared defense and secure a foothold, and a predominately infantry force divided into small decentralized units for conduct of the clearing operations. In both instances, the organization must operate as a combined arms team against a sophisticated enemy who will traditionally operate with a mix of combat and combat support units in the defense.

Training for MOUT operations must emphasize the capability of small infantry units to conduct assault and clearing operations. Platoon and company level commanders must be able to receive and employ fire support assets on a habitual basis to insure commonality of operating procedures. Individual weapons should be capable of a high volume of fire, and allow the individual to carry sufficient ammunition to conduct sustained engagements. Crew-served fire support weapons should be capable of short range engagements of less than 50 meters, be easily transported by the crew, and capable of being fired from enclosed spaces. A variety of ammunition is required to give the supporting fire weapons the ability to destroy armor, neutralize point targets, and create breaches in walls for infantry to pass through.

These capabilities are present in varying degrees in the two basic divisions under the Army of Excellence program, the heavy division (armor or mechanized) and the new light infantry division. However, is one clearly superior over the other? If not, then is a mix of the two divisions preferable, or is an entirely separate force required?

EVALUATION OF UNITS FOR MOUT

"Thus troops that are mechanized with M-113 type vehicles are still true infantry--regardless of the fact that they happen to have reached the battle-zone in APCs instead of trucks or helicopters."

--Edward N. Luttwak⁴²

The Army of Excellence heavy division is formed around ten maneuver battalions of M-1 Abrams equipped armor units plus mechanized infantry mounted in Bradley fighting vehicles. The division is designed to be employed where battles are fought over a wide area. Offensively, they are best suited to terrain which will allow them to fight using their speed, armor protection, and long range firepower to best advantage.⁴³ These characteristics are sufficient for some MOUT tasks, but pose serious problems in accomplishing the full range of missions.

Task organized heavy battalions are well suited to conduct hasty attacks against weakly held or poorly prepared urban defenses. The speed of the Abrams and Bradley vehicles allow the task force to rapidly mass to exploit gaps and weak spots in the defense. There is sufficient infantry to conduct dismounted assaults against scattered and suppressed strongpoints which may survive the preparatory and overwatching fires.

In the deliberate attack, the task force is capable of both isolating the objective and seizing the initial foothold. The long range antiaarmor missile fires of the Bradley and TOW vehicles plus the medium range tank gun and infantry fighting vehicle cannon

fires can combine with the indirect fires of the battalion heavy mortars and supporting artillery to dominate avenues of approach in and out of the area. The battalion receives division assets to form an assault task for seizing the initial foothold in a city. Suppression of known or suspected enemy positions is provided by supporting tanks, fighting vehicles and artillery. There are sufficient engineer assets to provide each brigade with a direct support company. These engineers have the capability to conduct deliberate breaching of minefields. Special equipment such as the combat engineer vehicle provides stand-off breaching of obstacles. The armor protection, stabilized gun systems, and speed of the tanks and fighting vehicles allow the assault force to close quickly with the enemy and overwhelm the defenses by shock and firepower.

The third stage of the deliberate attack reveals the critical flaw in the heavy organization for urban operations. The systematic clearing of the area requires much more infantry operating in decentralized actions than is available in the battalion task force. Each squad is capable of dismounting 5 men plus the squad leader in order to execute the clearing operations depicted in Appendix F of FM 90-10-1.⁴⁴ The six man dismount element can form an assault force of no more than two two-man teams without committing the squad leader, which would impair his ability to control the actions of the two assault teams. The limited dismount force precludes the formation of a dismounted support force at the squad level. Although the three man Bradley crew can act as the support team and provide impressive fire

support, it must be remembered that the urban battlefield is a three dimensional environment requiring clearance of buildings, basements, tunnels and alleys inaccessible to a vehicle.

Therefore, squad level operations which for tactical reasons cannot be supported by fires from the vehicle will require the commitment of the platoon as a unit. Operations at the platoon level will result in only 18 men plus the platoon leader. This unit must not only clear assigned sectors but commit a sizeable portion of its ground strength to provide close-in security for the Bradleys. A task force operating on a 150-600 meter front with only 216 available combat infantry (4 companies, each with 9 squads of 6 men) is incapable of conducting clearing operations, providing security, plus a reserve for possible counterattacks. The problem is exacerbated when personnel losses are considered. According to ST 101-2, Planning Factors, the first day losses for an infantry unit assaulting a fortified position will equal 6.6% of the total force.⁶⁵ Of those losses, 93% will be infantry.⁶⁶ Therefore, a full strength battalion (less attachments and detachments) of 844 can expect the initial attack losses to be around 56, of which 52 would be infantry. With the majority of these casualties in the dismount force, the battalion must quickly be filled with replacements or be relieved in place by other units. The historical shortage of infantry replacements in a major war is best exemplified by the Third Army's average fill of only 55% in 1944.⁶⁷

Extensive MOUT training is limited to two facilities in Europe, one in West Berlin and the other in The Federal Republic

which is shared by U.S and Bundeswehr troop units. Training in offensive MOUT is therefore limited by funds, space, and the pressure to train for the threat perceived to present the greatest danger, Soviet massed armor. This perception is reflected in the weapon systems optimized for long range fires, continuous line of sight, and mounting on armored vehicles. One recent report thus reflects that the only unit trained and equipped for MOUT is the Berlin Brigade.⁶⁸

In sharp contrast to the heavy division, the light division is specifically designed to emphasize infantry ground power at the expense of heavy weapons and logistical support. The division's nine light infantry battalions are organized, trained and equipped to be strategically deployable to deter or defeat light infantry forces in contingency areas outside of NATO.⁶⁹ The division is also prepared to perform missions in NATO with proper augmentation and special consideration for the terrain. While Field Circular 71-101, Light Infantry Division Operations, lists MOUT as suitable missions for the division, it also points out several weaknesses that make the division unsuitable for some types of offensive urban combat.⁷⁰

The division has limited capability to execute a hasty attack. It has limited organic assets to conduct airmobile operations or to transport troops by motor transport. Therefore, without augmentation the light battalion may not have sufficient tactical mobility to exploit uncovered weak spots before the enemy can react.

The first two phases of the deliberate attack provide further

difficulties to the light battalion. The unit has no significant long range weapons to cover avenues of approach into the enemy strongpoint, and therefore would need to physically block each avenue or receive augmenting heavy forces in order to isolate the objective. The assault phase would be dependent on the ability of the battalions to utilize limited visibility and covered and concealed approaches to the objective. The advantages of such a force being able to infiltrate the enemy defenses must be considered in the light of normal Soviet defensive doctrine. Security forces placed well forward along likely avenues of approach could detect the attack and bring in large volumes of artillery fires, the most effective weapon against dismounted troops. Perimeter approaches are normally covered by obstacles and minefields. The division's engineer battalion has only two platoons per company and is incapable of conducting deliberate minefield clearing operations without augmentation.⁷¹

The incessant reliance on augmentation of the light division by assets of the forward deployed corps is made on two very questionable assumptions. The first is that a forward corps receiving a variety of reinforcing units, organizing new support organizations, and suffering unknown battle losses will have sufficient combat and logistical units to support the light division. While the concept is plausible, the Clausewitzian concept of friction is likely to dominate.

The second and more serious problem is the mixing of combat units with different combat and logistical doctrines. The heavy units are designed and trained to conduct mobile operations in a

high intensity conflict. The light division is designed and trained to fight a positional battle in a low intensity environment. Unless there is an opportunity to train together and develop a mutual operating concept, their wartime performance together is questionable. General DePuy cites the example of the 505th Parachute Infantry and tanks of the British Grenadier Guards conducting successful ad hoc operations in the battle for Nijmegen in September 1944.⁷² The caveat that must be applied to this example is that both of these veteran units were facing a understrength, poorly trained enemy occupying a hasty defense. The more recent example of Suez City is perhaps indicative of the results of mixed light and heavy units attacking a prepared position without insuring operational commonality in doctrine and training prior to the engagement.

Cross attaching logistical units will face similar problems. The light division still uses the forward support company mix in the brigade support area while the heavy division support command and COSCOMS are structured for the forward support battalion concept. Although the light division is supposedly capable of accepting corps support plug-in packages, the very concept worries some of the Army leaders such as former Chief of Staff General Edward C. Meyer who warned that, "When you plug something in, you find it does not do well unless you offset the fact that plugs are not permanent by some very, very strong training relationship.⁷³

In sum, neither of the Army of Excellence divisions is capable of adequately performing all of the doctrinal missions for

offensive operations in urban terrain. Therefore the Army should give strong consideration to organizing and equipping a third type of division that would possess the doctrinal and historical strengths for conducting combat operations against a Soviet threat.

The division should be organized with more infantry battalions than a standard mechanized division since it will be required to conduct more extensive dismounted operations. The number should also be less than the number found in the light division, since room should be made for supporting armor battalions to be organic to the division. The division's infantry should be equipped with armored personnel carriers to provide the squad with tactical mobility and protection. The squad must be large enough to dismount a nine man force and, like the light infantry squad, will always fight dismounted. The carrier will allow the squad to carry heavy weapons and equipment like the heavy division, but the weapons must be capable of being employed in a short range (50 meters), direct fire mode and be man or crew portable in order to engage in the close-in fight characteristic of the light infantry. Finally, the infantry must trained to work as a true combined arms team like the heavy division, yet consistently fight decentralized, dismounted small unit actions like the light infantry. In short, this hybrid unit will combine qualities of both types of divisions to produce its own unique capabilities.

CONCLUSION

"We run into a curious void in the literature of warfare. The practitioners of the art who were also its ablest theorists, scholars and writers dwelt on its various aspects to the limits of their imagination. One thing, however, they did not touch upon-combat where life is centered. Run through the lists of writers and their works-Frederick, de Saxe, Clausewitz, Jomini, Kurupatkin, Bernhardi, Henderson, Foch, Fuller, Hart et al. Not one has anything to say about military operations against the city. Either the subject was too sticky, too little understood, or it was dismissed as unimportant."

--S.L.A. Marshall⁷⁴

The conflicts of the last forty years have witnessed a growth in the frequency, intensity and strategic impact of combat in the cities. The battle at Stalingrad marked the end of German penetration into Russia. The battle of Berlin marked the end of the Third Reich. The capture of Seoul doomed the North Korean Army and ensured a United Nations victory until the Chinese intervention. The inability to quickly defeat the North Vietnamese in the city of Hue during the TET offensive played a key role in a tactical victory for the U.S. being perceived as a strategic defeat for the alliance. The most recent urban conflicts in the Middle East have been tactical battles with far reaching political consequences.

The tactical, operational-strategic, and political implications of urban combat have not gone unnoticed by the Soviets. They maintain a significant capability to conduct

operations to capture key urban objectives in any future war in Europe. The decision to engage in operations to recapture these cities may be the result of pressing military requirements, or the result of calculated political decisions at the highest level. The lack of a viable U.S. force capable of executing the decision may well provide the Soviets an advantage worth exploiting.

With the implementation of the Army of Excellence, the U.S. Army will have a force structure to meet the doctrinal requirements to fight a maneuver-oriented, armor-dominated high intensity conflict and an infantry-intensive, low intensity conflict. The establishment of a hybrid infantry force would fill the gap in the middle which the light and heavy divisions, by the evolutionary process of specialization, have forfeited.

Colonel Huba Wass de Czege provides an excellent concept of this hybrid organization in the July-August 1985 issue of Infantry magazine. Simply called "regular" infantry, this organization is designed to do the most standard of missions for the infantry- to take and hold ground. The "regular" infantry uses an armored carrier to ride to work and carry the tools and equipment too numerous and heavy to be individually carried, but the unit always fights dismounted. Colonel Wass de Czege finishes his concept by pointing out that such a force is currently available in the form of the M-113 equipped mechanized infantry battalion.⁷⁸

Retention of the H-Series mechanized infantry battalion in selected Active and Reserve Component units would provide an organization that could best employ the current MOUT doctrine,

reinforce the Total Force concept, and not exceed force or budget constraints. Most importantly, it is a force that is available immediately to meet the growing threat of combat in the cities of Europe.

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